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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,982	03/22/2001	Herbert Ulrich	879.155USWO	1258

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EXAMINER

LEYSON, JOSEPH S

ART UNIT

PAPER NUMBER

1722

DATE MAILED: 08/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 09/787,982	Applicant(s) ULRICH, HERBERT	
	Examiner Joseph Leyson	Art Unit 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

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1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, (1) the vacuum chamber including measuring tools as recited by claim 6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 is incorrect. As understood from the instant specification, the vacuum seal 9 maintains the vacuum in the vacuum calibrating bath 4, NOT the vacuum chamber 2. The examiner suggests making claim 12 dependent upon claim 11 and

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changing "chamber" in line 3 of claim 12 to --calibrating bath--.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6, 7, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB (2 182 603) in view of Carlsen(-460).

GB (2 182 603: fig. 2) disclose a device including an extruder with a die head 11 configured to extrude a melt column 22 having an outer surface defining an outside diameter, a vacuum chamber 29 positioned in the device adjacent the extruder, the chamber 29 allowing for varying the vacuum therein thereby creating a bubble 22 defining the outside diameter of the extruded tube. The bubble size (outside diameter) is controlled by a vacuum connection (p. 2, lines 74-80). The extruded melt column 22 is moved from the extruder into the vacuum chamber 29. The outer surface of the melt column is exposed to the vacuum in the vacuum chamber 29. And a change in

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the vacuum changes the outside diameter of the melt column in a controlled manner (p. 2, lines 74-80). A calibrating station 19 is adjacent to the vacuum chamber 29 and configured to calibrate the outer diameter of the melt column to a predetermined diameter. A vacuum calibrating bath 20 is adjacent to the calibrating station 19 and configured to bath the calibrated melt column to cool and harden the melt column. However, GB (2 182 603) doesn't disclose the chamber including measuring tools configured to determine the outside diameter of the melt column.

Carlsen(-460) discloses a device including an extruder with a die head for extruding a melt column, blower means 12 and vacuum means 14 which create a bubble defining the outside diameter, and measuring tools 21 which detect the outside diameter of the melt column. By changing the means for creating the bubble (i.e., the blower means 12 and the vacuum means 14) based upon the measuring tools, the outside diameter of the melt column is controlled by direct measurement. The measuring tools operate with sensing tools resting on the outside wall of the melt column (col. 3, lines 9-20; fig. 1).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the vacuum chamber of the apparatus of GB (2 182 603) with the measuring tools for detecting the outside diameter to control the outside

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diameter by varying the bubble diameter based upon the measured outside diameter as disclosed by Carlsen(-460) because such a modification would enable feedback control of the outside diameter by direct measurement.

6. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB (2 182 603) in view of Carlsen(-460) as applied to claims 6, 7, 10 and 11 above, and further in view of Sweeney et al.(-966).

Sweeney et al.(-966) disclose measuring instruments which control an outside diameter of an extruded melt column in a touch-free manner by means of sound or light sensors 166, 164, 162.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the apparatus such that the measuring instruments of Carlsen(-460) are replaced by the measuring instruments of Sweeney et al.(-966) because such measuring instruments are art recognized alternatives for measuring the outside diameter and because the measuring instruments of Sweeney et al.(-966) would provide measurements in a touch-free manner.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over GB (2 182 603) in view of Carlsen(-460) as

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applied to claims 6, 7, 10 and 11 above, and further in view of Loe et al.(-873).

Loe et al.(-873) disclose a vacuum seal 10 configured to engage the outer diameter of a melt column to maintain the vacuum in a vacuum calibrating chamber 4. The vacuum seal is a flexible collar (col. 3, lines 43-44) and thus is capable of automatically adjusting to seal the outer diameter.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the apparatus to include a vacuum seal as disclosed by Loe et al.(-873) because such a modification would provide a seal for the vacuum calibrating chamber.

8. Applicant's arguments with respect to the instant claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that GB (2 182 603) discloses the use of air through passage 4 to provide the tube with internal air pressure. However, applicant has not properly read the examiner's rejection which is directed particularly to the embodiment of fig. 2 of GB (2 182 603).

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is

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reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Leyson whose telephone number is (703) 308-2647. The examiner can normally be reached on M-F(8:30-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (703) 308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

jl

jl
August 11, 2003

James P. Mackey
JAMES P. MACKEY
PRIMARY EXAMINER

8/11/03